Report on the debate regarding EU cash payment limitations

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Abstract

Purpose – Response to suggestion that EU-wide cash payment limits would assist in the control of terrorism finance and money laundering.

Design/methodology/approach – Desk review and interviews

Findings – The inception impact assessment (IIA) is ill-conceived, not grounded on firm empirical evidence and harmful to both crime control and the legitimate interests and rights of the EU citizens. The action under discussion is presented as a measure against terrorism finance, serious crime and tax evasion. The problem is that these criminal acts correspond to very different methods, volumes, perpetrators, causes and control challenges. Cash payment limitations (CPLs) are nowhere near a panacea that can address all of them and cannot make any of them go away magically. Even when each of these crime challenges are considered on their own, the empirical linkage of CPLs to effective controls is not there. The evidence from EU countries with CPLs in place shows higher levels of informal economy, corruption, tax evasion and terrorism risks than those without. There is substantial evidence of non-cash, very serious and organized crime, while the amounts needed and used by terrorists in Europe are usually very small in cash transactions, way below the thresholds under consideration. In fact, determined offenders will shift to other methods and become more sophisticated, posing new problems to controllers. Displacement and incentives for better-organized crime may well be the main products of such measures.

Originality/value – It counters the argument that the cash payment limits can help reduce serious crime, while pointing to several adverse consequences on legitimate interests and human rights.

Keywords EU policy, Human rights, Organized crime, Money laundering, Cash limits, Terrorism finance

Paper type Research paper

Introduction

The European Commission announced a public consultation on the March 1, 2017 with respect to cash payment limitations (CPLs) following the adoption of the action plan of the February 2, 2016 “against the financing of terrorism”. This action plan suggests that because “payments in cash are widely used in the financing of terrorist activities”, we should explore “the relevance of potential upper limits to cash payments”.

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The goal of detecting, monitoring and investigating serious crime is beyond dispute, but there are serious doubts as to whether CPL would advance this cause substantially or that any incremental benefit would be without considerable negative effects. Cash is popular, safer and serves a long list of legitimate social and economic values that CPL would undermine.

Arguments for a "cashless" or "less cash" society are also made for convenience and facilitation of payments, shorter remittance timelines and better control for monetary and tax policies. Cashless is a buzzword for commercial and internet giants such as Amazon, Google and Facebook and telco companies such as Apple and Vodafone[1].

While traceability is a worthwhile goal for law enforcement, one cannot sacrifice economic interests and livelihoods, freedoms, privacy, subsidiarity, proportionality and indeed the cash preferences of the people for what is likely to be incomplete and ill-balanced transparency and, in some respects, more challenging policing work.

This report critically examines first the articulation and presentation of the CPL case; it then turns to an assessment of serious crime control issues and CPL and ends with a review of legitimate interests that may be harmed by CPL.

The conclusion is that CPL would not pass a cost-benefit analysis. The stated goals would not be as well served, the negative effects and risks are legion and popular support by the population is lacking. Attempts to introduce CPL, therefore, are out of proportion with the intended target and interfere with strong legitimate interests. Given the preferences inside and outside the EU, centrally imposed rules in this respect are ill-advised.

The presentation of the European Union initiative

Inception impact assessment

The IIA suggests that cash payment limitations (CPLs) can be effective measures in the control of serious crime, such as terrorism finance, serious organized crime and tax evasion. However, these criminal acts correspond to very different methods, volumes, perpetrators and causes and control challenges. Mixing them and moving from one topic to the other is unhelpful for crime control strategies.

Terrorism finance, as practiced recently in Europe, involves extremists who use overwhelmingly legal funds, sometimes commit petty offences, engage in very small-amount cash transactions, occasionally use fake IDs and commit low-cost attacks (see more below). They are motivated by political and religious causes or grievances, and they are either inspired by or have some association with local or overseas groups (e.g. Daesh), in some instances, involving cross-border interactions.

Serious crime includes criminal enterprises popularly described as "organized crime" as well as offences with substantial social cost committed by corporations and white-collar professionals. All of them are motivated by profit and power, many of them commit offences of transnational nature and the amounts involved can be staggering. Criminal enterprises are a mix of national and ethnic groups regularly committing offences ranging from drugs and human trafficking to smuggling of goods, property crimes, counterfeiting, etc. Cash is used but not declared. Corporate and white-collar offenders come predominantly from the more respectable and wealthy social strata, often use very sophisticated methods and transact both nationally and globally, and their misconduct can have devastating economic, social, environmental, health or security effects (Barak, 2017; van Erp and Huisman, 2015). Cash is very often not involved at all.

Tax evasion including some lawful but awful (Passas, 2005a) tax avoidance schemes that equally affect society by shifting the burden of social contributions to lower-income and less privileged members of society (Brooks, 2013; Johnston, 2003; Levi, 2010) can be committed by anyone. The amount can vary and involve accounting frauds, offshore and tax haven jurisdictions, legal manipulations or simple non-reporting violations. Motives can be anything from profit-maximization and family needs to complaints about corruption, irresponsible governance, ideological opposition or inadequate social services expected in return.

Such diverse social problems have diverse causes, pose different control challenges and cannot be addressed by simple or the same measures. The introduction of CPL is no panacea and would not make them disappear. CPL may in fact render some of them more sophisticated and harder to detect. As we will see below, even when these crime challenges are considered separately, the empirical linkage of CPL to effective control is not there.

Finally, the IIA articulation also suffers from inadequate empirical backing. In support of its statement that "there are also several studies and academic journals that indicate the strong linkages of criminal activities by organized criminal groups to money laundering and large scale payments in cash", it cites one working paper that discusses ordinary street crime (Wright *et al.*, 2014), an issue unrelated to the current debate. Studies and crime statistics may show dropping rates in poor suburban area and in robbery, assault or bank thefts and attacks on security vans after CPL. There are no statistics, however, to show any corresponding decline in organized crime, corruption, fraud, tax evasion or terrorism activities.

The inception impact assessment questionnaire

The questionnaire is constructed in a way that raises concerns about how well it can achieve its stated goal of collecting "the view of citizens, businesses, public authorities and associations" in a fair, open, transparent and unbiased manner.

In general, the survey asks opinions with no reference to research establishing any of the facts relating to CPL, its effects or its capacity in reaching the targeted offences. The wording is often unclear, leading or leaves out important answer options. Many questions subtly pool different aspects, leaving respondents free to interpret questions in different ways and thus muddying the results. The multiple-choice options are sometimes limited to the intended responses and poorly worded or artificially sub-divided. While the construction of each question is problematic in itself, there is concern about how answers to these questions will be discussed and interpreted alone and in combination with each other[2].

This methodologically unsound survey cannot serve as a basis for an honest discussion on this important subject.

In short, the IIA is unsupported by facts, badly articulated and accompanied by a leading, rather than fact-finding survey. As seen below, it is also overconfident on crime control effectiveness, and it does not take into account several positive and useful features of cash that will be negatively affected by CPL.

The stated goals of the European Union initiative: more effective control of serious crime?

Terrorist finance in the European context

Historically, there is a wide range of terrorism fund-raising methods and sources, some of which are particular to specific groups or contexts, while others are quite common across the board. Some of the funding sources are legitimate, such as ordinary income, legal businesses, investments, family support, state actors, charitable organizations and cultural activities. Other sources are criminal including petty crime, blackmail, kidnapping and ransom, smuggling and criminal enterprises of various types. Terror groups are opportunistic and take advantage of whatever sources are available in their environment of operations and consistent with their ideology (Naylor, 1995, 2006, 2014; Normark and Ranstorp, 2015; Oftedal, 2015; Passas, 2005a, 2005b, 2006, 2007, 2008, 2011, 2016a, 2016b;

Warde, 2007). Effective counter-terrorism strategies take into account the specificity of different groups and are based on a good understanding of their origins, beliefs, possible sympathizers, methods, targets and geographic area of activities.

Operational expenses for terrorism are low and below the radar screen of financial controls. Operating costs for Daesh and similar large terror groups are higher and can be significant. These, however, are not inside the EU, where CPL would apply. There are no indications of a large-scale network that has received or was in need of funding from outside Europe for expensive operating costs, such as communications, training, maintenance of sleeper cells and welfare.

When it comes to the current situation in Europe, we know that:

> [i]n 73 % of the plots in Europe in 2014-16, the terrorists generated at least part of their income from legal sources such as salaries, welfare benefits, sale of property and loans (Nesser *et al.*, 2016, p. 15).

Some Daesh-inspired extremists had a criminal past and acted in line with its encouragement to use "war spoils" (stealing from infidels) to finance jihad (Basra and Neumann, 2016). However, "contrary to widespread notions of a crime-terrorism-nexus, criminal activities are not a very common source of funding for attack plots in Europe of late" and "there is little evidence of an increasing integration between criminal networks and terrorists in the area of attack financing" (Nesser *et al.*, 2016, p. 16; van Dijck, 2007). This is exactly what happened in the Manchester bombing too (Mendick *et al.*, 2017). Most of the financial transfers related to terror events in Europe have been through cash[3], money services providers and formal bank transfers (Normark and Ranstorp, 2015). Hawala has been used at least a couple of times in Europe, but more may have been done this way undetected (FATF, 2013; Nesser *et al.*, 2016; Passas, 2010, 2011, 2015).

Cash for terrorists' routine activities and fund transfers cannot be stopped by CPL, as they will simply not report it, even if they had to. The amounts involved are too small and unremarkable to raise red flags[4]. Cash can be spent and shared in amounts well below any suggested threshold. Cash can also be moved to jurisdictions with lax or non-existent controls and start any conceivable laundering cycle from there.

Cash offers anonymity, but there are other methods to hide from authorities. Fake IDs are one such option, as we saw with the cell behind the Paris and Brussels attacks (Basra *et al.*, 2016) as well as in the UK (HM Treasury, 2015). Smuggling[5], trade diversion (DeKieffer, 2008), misinvoicing (Passas, 2010, 2011) and barter deals are also possible (services, goods provided freely or under threats; commodities, such as drugs, tobacco, alcohol or diamonds)[6]. The use of third parties to avoid detection can be forced, if other options are restricted, so conceivably more people could be blackmailed or forced to allow some amounts to go through their accounts on behalf of terror and organized crime groups[7].

Such options may become more frequent in the event of CPL. So, at best, CPL would displace the problem, shift financial patterns and provide incentives for offenders to become more sophisticated and better organized. Importantly, the highest terror risks (Rodrigues, 2015; Pieters, 2017) and incidents are actually in EU countries with CPL in place, such as France, Sweden, Belgium, UK and The Netherlands[8].

Other serious crime and money laundering

I would like to clarify at the outset that the use of illegitimate money for illicit activities is not money laundering but a transfer or exchange of value within the criminal context. Criminals and extremists do not ask for certificates of origin or receipts when they engage with one another, so cash transactions between them can be of any size regardless of anti-money laundering (AML) and CPL measures.

When it comes to serious for-profit crime, there is a long list of recent and old cases that illustrate how extraordinary and systemically consequential damage is caused by methods that involve no cash at all. The offences include among others unlawful risk taking, frauds, money laundering, sanctions violations, LIBOR interest fixing and corruption[9]. Implicated are some of the biggest financial institutions in the world, such as Deutsche Bank, HSBC, BNP Paribas, Lloyds, JP Morgan Chase and many others. None of these serious crime risks would be controlled or eliminated under CPL. Ironically, the culprits were institutions to which citizens would have to turn their cash under CPL.

Organized criminal groups often generate sizeable amounts of cash and other assets. It is known that drug trafficking, prostitution, illegal gambling, counterfeiting businesses to consumers (B2C) are high cash generators for the organized crime groups managing these illegal activities. A limitation of the cash use will certainly and temporarily decrease the volume of business of such B2C consumers, as other payment methods will be implemented. For example, in Macau, as well as in other cities in Russia and Eastern Europe, parallel currencies such as the “black chips” in Macau and Hong Kong, have become alternative currencies for consumers to buy illegal services in total discretion and in total legality because the “black chips” are not legally considered as a currency. Prepaid cards in cryptocurrencies are being more and more used with a dramatic increase of value limits and no currency control at all. Bitcoin is being not only used for ransoms but also to trade goods and services, both legal and illegal, worldwide.

In some African countries, such as Kenya, the mobile phone recharge is often used as a real currency for trade between individuals.

When it comes to the B2B illegal businesses and trades, dirty cash goes to dirty business, and there is no need for laundering, so none of it gets reported anywhere or could be controlled under CPL. Moreover, many money laundering techniques use non-cash tools (Baker *et al.*, 2014; Naylor, 2007, 2008, 2014; Passas, 2011, 2017). The Laundromat case alone involved close to $21bn, 5140 companies, 732 banks and 96 countries[10]. If cash is to be used, it may be taken to jurisdictions where scrutiny is avoided. If cash is not an option, launderers may turn to heavier use of shell companies, the dark net, cryptocurrencies, trade- and service-based money laundering or other channels. As with terrorist finance, CPL would lead serious crime and money laundering to other methods, channels and locations.

Finally, where they have been introduced, CPL have not reduced crime and underground economic activities. In fact, countries with the stricter cash-limits also have higher rates of shadow economies. The shadow (unregistered) economy is huge in countries with cash transaction limits[11].

The same applies to the problem of corruption, which is high and is perceived to be high in countries with CPL.

Tax evasion is also a difficult problem in many countries. However, the mixing of terrorism, serious crime with money laundering arguments muddies and inflames the debate about CPL (Holle, 2016). Some have even argued that CPL might decrease tax compliance and increase tax evasion. The trust that citizens have in the state has to be reciprocated by the state using its revenue carefully and accountably. When citizens see misuse and waste in state budgets, they may be less willing to pay taxes, which would be much better counteracted by involving the citizens more directly in decision-making. On the other hand, increasing surveillance and decreasing freedoms fuel distrust, a feeling of tax injustice and of impotence toward the state, thus leading to more rather than less tax evasion[12].

Rather than limiting cash, societies would benefit from other forms of control. Tax evasion is better dealt with by better regulation, more effective state services and responsiveness to citizens, regulatory reforms to reduce tax avoidance and related lawful but awful practices (Bhat and Deutsches Institut für Entwicklungspolitik, 2009; Brooks, 2013; McGee, 2012; Levi, 2010; Williams, 2012).

Finally, it is noteworthy that countries with high denomination notes are low on crime and organized crime (e.g. Japan, Singapore, Switzerland or UAE), while crimes with very low denominations are high on crime (e.g. Brazil, Nigeria, South Africa or Venezuela) (Black, 2016). Tax evasion and corruption do not necessarily go hand in hand with low denomination notes either: Georgia, for example, has a $200 denomination note, but it enjoys lower corruption and tax evasion rates. Malaysia and Uzbekistan, by contrast, have their highest notes in the equivalent of $11 and $1.57 but suffer much more corruption (Black, 2016).

In short, CPL or cashlessness will not eliminate for profit or ideologically motivated crime. Alternatives to illegal transactions and value will substitute cash. If this is more expensive, the cost will be passed on to consumers. As payments go digital, methods change and fraud goes up, as nearly cashless Sweden witnesses rising card fraud rates (Mai, 2016).

Law enforcement needs

Crime controllers can do their job best when there are investigative trails. Transparency is a means to traceability but not synonymous to it. Transparency is about the easy access to comparatively mechanized data, whereas traceability is the capacity to find answers to investigative questions. Big data collection and analysis may provide a lot of transparency, but this has to be combined with access by those who need to know, fast sharing of information and solid analysis. Terrorists from Boston to London and other parts of Europe were on the authorities' radar screen, but the attacks were not prevented. Better use of available data and timely and proper cooperation are more effective than more data that end up fragmented, wasted or abused.

Traceability is important to detect and monitor offenders or their assets before and after a crime is committed. Criminal trails are broken by cash transactions, but they can also be broken by other means such as pre-paid cards, fake IDs, third parties, misinvoicing or barter deals. CPL would simply displace crime and make determined offenders smarter. Techniques to fight smuggling and illicit trade, integrated analysis of data from various industries when there is a legitimate need to access and analyze them (e.g. telephone records, other communications, travel and CCTV) on the basis of clear criteria, and through supervised and accountable procedures, they can help far more with crime and security threats than drastic measures across the board such as CPL.

As it is presented, the CPL will have a strange effect on law enforcement itself. By providing more information to the financial actors, mostly banks, clearing houses and internet monopolistic operators, the system will place them at the core of the financial side of law enforcement. The financial data provided by millions or billions of users about their payments habits, patterns and volumes will not only provide these operators as fantastic data lead for commercial and political marketing but also will place them in a position where they provide core data for law enforcement inquiries. In other words, law enforcement institutions will become dependent on these operators for the application of law enforcement. Unfortunately, this situation is not a future scenario or even a probability. It is already happening for decades. Cases have shown how sometimes these private operators behave against the law: the Italian inquiry called "why not" conducted by the PM Luigi De Magistris, former Italian prosecutor, former MEP and current mayor of Naples, has shown how telco operators were selling the possibilities to add or cancel data from the phone and message logs against payments. The same happened with different banks after the 2008 crash as well as other financial manipulations, where the financial institutions themselves failed to apply basic compliance diligence.

Even if some marginal gains could be made by CPL, the heavy price they come with militates against their adoption. Some of these costs are outlined in the next section.

Negative impact of cash payment limitations

Legitimate international movement of large amounts of cash

Money transmitters and money exchange dealers handle huge amounts of cash around the world as part of their business. These enterprises cater to customers who value cash for a variety of legitimate reasons. This is a thriving industry in many parts of the world, which services tourists, traders, students, overseas workers and others. This business model requires the physical presence of cash in the premises to engage with clients.

Many ethnic expatriates living in Europe, use money changers to send or receive money from their country of origin. The laborer remittances market is more than $400bn annually. Overregulation and exclusion, however, bring higher costs and negative effects for development and livelihoods in many countries. Among others, these can become drivers for (il)legal migration or even radicalization (Orozco and Yansura, 2013; Passas, 2016b; Todoroki *et al.*, 2014; Watkins and Quattri, 2014).

Traceability is less of a challenge in these cases: even when customs do not require a declaration of their value (often only requiring a declaration of the weight of the shipment), insurance declarations show the value. Formal and informal money remitters can in fact be an intelligence asset and assist in terrorism and serious crime cases, whereas aggressive state regulation can lead to illegality, non-cooperation and loss of insight into money movements (Passas, 2016a, 2016b).

Yet, CPL would undermine this industry and its clients.

Lower cost

It is widely argued that a cashless society will provide financial services for both end-customers and businesses that are cheaper, quicker, more reliable and traceable than cash.

Cash is easier, user-friendly (AGIS, 2015), cheaper and more widely accepted than most electronic transfers[13] for B2C transactions. While the cost per transaction varies widely from country-to-country, cash-related costs are lower in nearly all countries with very few exceptions (AGIS, 2015, p. 52-55). A survey of the Bank of Canada on the prevalence of cash (Carlos *et al.*, 2012) found that the majority of transactions are conducted in cash because it is widely accepted, easy and cheap to use, helps to control spending and confers some privacy.

The cost of cash transactions increases with the amount. As a result, the share of cash transactions in high-value transactions decreases in general[14] (AGIS, 2015, pp. 52-55). Fixed fees in non-cash payment methods, such as bank charges, currency conversion charges and money transfer fees constitute high costs in smaller transactions and are controlled by the availability of competing options (i.e. cash, hawala and other informal channels). The cost of cash transactions is used as a benchmark against which the efficiency of all other payment methods is measured. Cash ensures that there is competition between transaction methods (AGIS, 2015). In vulnerable segments of the population, bank charges and other fixed charges constitute a major obstacle to being banked (FDIC, 2015). Consequently, the needy would be further disadvantaged by the introduction of CPLs.

Privacy

Despite the fact that anonymity and privacy may be used to engage in crime, there are legitimate interests and reasons to protect these values. Privacy and informational privacy are basic rights. Nurseries can be used for ML and crime too – yet, no one would argue that we need to limit them to control crime!

At a time when privacy intrusions take place both from state and non-state actors[15], the burden of proof regarding the necessity of drastic and unpopular measures must be borne by the policymakers. The evidence supporting such drastic measures is far from compelling. Today, to be able to use what is considered as basic internet services, people are forced to give their personal data to private companies (e.g. bank, credit card company, Google, the merchant) with little or no control over them.

Past experience suggests that there is a slippery slope, lack of state accountability and a temptation to consider every citizen a suspect: Germany introduced a law in 2005 that allows the fiscal authorities to look at citizens' bank accounts, when tax evasion or terrorism is suspected. It was promised to be used only in emergency cases, but in fact, it has been used in hundreds of thousands of cases automatically[16].

No cash, higher risks

A cashless society may lower the operating costs for the financial system itself as well as the Central Banks. In 2016, only in the UK, banks have closed 1,046 branches in the territory. The banking system is adapting to the new digital era by going more and more online. Because of the more stable and widespread internet connectivity through computers and mobile devices, because of the growing use of internet banking and other online payment facilities, branches are becoming extremely expensive to maintain. As a result, branches are closing and people are fired. Most of the banks own their real estate, and it becomes more lucrative to rent or sell the propriety than to operate them for their business. But cash is something that needs physical exchange, i.e. a cashier or at least an ATM machine. These are maintained and their number is growing, suggeting that people want cash in their hands. As a real item, cash needs logistics that is costly: security vans, secured storage place, movements to refill the ATM, etc. It is then very easily understandable that going into a cashless society will mostly benefit the financial operators and the banks that can get rid of all these costly logistics.

But the massive gains are not in the savings of the reduced logistics. Euros as other important currencies in the world are called "fiat money". That means that the production of monetary mass (including cash but not limited to it) depends both on the seigneurage rights and the fractional reserve. The seigneurage is the difference between the production cost of a currency unit and its face value. For example, the production cost of the new Swiss banknotes (CHF 50 and 20), considered as the most secured and sophisticated note in the world is of CHF 0.40[17]. So the seigneurage right that is usually reported in the balance sheet of the Central Bank which produces the banknote is the difference between the production cost (CHF 0.40) and the face value of the note (i.e. CHF 50) – i.e. CHF 49 and 60. The cost of production of the euro banknotes is extremely secret, and the production itself is decentralized throughout the EU countries, even outside the Eurozone. Given that the euro banknote is less secured than the Series 9 of Swiss banknotes, we can assume that the production cost will be much lower than its Swiss equivalent; thus, the seigneurage rights will be higher.

However, in a cashless society, the production of €100 in a bank would only be worth the click of the operator. Thus, the margins are even higher, both for the Central bank and for the private banks, thanks to the fractional reserve. Indeed, as the cash/currency redeem demand is never equal to the amount of liquidity deposited in the bank (with the notable exception of bank runs), the cover of real cash in the banks is way below the total amount of currency generated by the bank itself. This is called the fractional reserve as the financial institutions only have to maintain a fraction of the totality of their listed deposits in redeemable currencies. In a free-banking system, as every depository bank can create its own currency 100 per cent backed by its depository assets, the fractional reserves allow the bank to multiply the assets by 10, 20 or even 30 times. This means that when customers make a deposit of €100 to a bank, the bank legally has the right to produce up to €3000. Creating these €3000 costs nothing and the seigneurage rights become privatized. But the fractional reserve allows the bank to create "fiat money" (money out of thin air) in only two forms: digital or credit (because they cannot print banknotes).

In a cashless system, there would be no need for fractional reserve, as money can be created on demand by a simple click. There cannot be bank runs, as the banks can issue as many assets as they want. But more than that, they deepen the abyssal difference between the real economy – those who work, trade and produce for money – and the financial economy, which creates money on demand. How strong can be self-regulation or the supervision of Central banks when extreme leveraging, derivatives and other risk issues have been raising concerns at least in some quarters?

In a cash economy, the volume of credit possibility for banks is limited by the amount of real deposits made by the bank's clients. In a cashless system, as every transaction is digital, the securities of the banks also will become digital with no limit. The problem is that such a responsibility cannot be delegated to private institutions with unreliable and weak controls or reporting duties.

Potential abuse

There are well-grounded concerns that new powers in a cashless society might be abused – as shown by debates about big-brother state policies, excessive intrusion and controls, use against political opposition or personal enemies, use by criminal groups or corrupt officials, etc.

There are so many instances in the past, where financial institutions have prioritized short-term profit goals, have taken excessive risks, have taken advantage and abuse market and other powers (Passas, 2016a, 2016b) that this beg the question: How much can we trust the banks with additional powers?

In the new world of the internet of things and big data used for commercial and political reasons, how much can we trust data mining companies and institutions that collect, sell or can have hacked masses of information? They may turn the data over to state agencies knowingly or unwittingly – see, for example, Snowden and Wikileaks revelations (Greenwald, 2014; Harding, 2014). In this light, the recent BBC coverage on the "tentacles" of Facebook and the amount of data they can collect[18] or Google's planned tracking of credit card spending[19] give causes for concern and the need to think such developments through and under the prism of rule of law, ethics, integrity and social justice.

Trust

Cash does not provide personal data on its user as digital money transfer does. As these data are used for commercial or political marketing purposes with little or no control by the citizens over their collection, storage or use, cash provides data protection, and it can therefore serve as a guarantor of civil liberties in the event a corporate or public agency abuses its powers. Drastic reduction or abolition of physical cash may be regarded as an attempt to intensify control over citizens, in which case the trust in private and public authorities may erode (Mai, 2016).

Cash is the manifestation of trust in the socio-political framework. It provides a direct link between the citizens and their community through the guarantor role played by the Central Bank. This connection is important to the functioning of a society, and the German Central Bank, among others, wishes to maintain it[20].

Cash is trusted and part of social networks (AGIS, 2015). Some have argued that we live in a time of unprecedented social and technological upheaval. With socio-political contracts breaking down in many parts of the works, trust needs to be rebuilt by involving all stakeholders in an honest and informed discussion (Kaspersen, 2016).

Cash and trust in the state are inseparable (Solms, 2016). This theme of trust correlates with the thinking of German sociologist and philosopher George Simmel who wrote in 1900: "Geld ist die vielleicht konzentrierteste und zugespitzteste Form und äußerung des Vertrauens in die gesellschaftlich-staatliche Ordnung" – "the feeling of personal security that the possession of money gives is perhaps the most concentrated and pointed form and manifestation of confidence in the socio-political organization and order" (Guido, 2001; Simmel, 1990).

Cash provides a safety net for savers against predatory attacks by state policies or confiscation. Since the 1980s, governments throughout Europe have promoted private retirement savings and participation in the stock market to increase personal responsibility for retirement savings. The current drive toward negative interest rates and total transparency does not mix well with this policy.

Trust in the banks is also essential. Trust is the main asset for any bank. However, this trust has been shaken both by the scandals and misconduct mentioned earlier and by new rules affecting depositors. The EU Bank Recovery and Resolution Directive[21] institutionalizes and crystallizes as a future practice – in the event of a financial crisis and bank failures – more or less what happened in Cyprus recently. At first, it was feared depositors would lose 60 per cent of their savings above the €100,000 threshold[22]. The losses ended up to be capped at 47.5 per cent: "Authorities initially converted 37.5 per cent of deposits exceeding €100,000 ($132,500) into equity, and they held an additional 22.5 per cent as a buffer in the event of further needs" (Kambas, 2013).

With continuing bank instability (see Greece, Italy, Deutsche Bank, etc.), CPL and related new rules would place life savings at risk. Given the checkered past of financial institutions, is it sensible policy to try and force citizens into investment and deposit vehicles they would rather use less and which are possibly quite risky? So, in the post-Cyprus context of bail-in rules, people are correct in fearing that in the event of a new crisis that many are warning is inevitable[23], they stand to lose their hard-earned money. Depriving them of their right to invest conservatively, save securely and transact in their traditional way is hard to justify.

As stated before, way too much power and control will be passed on to financial institutions that may not use it always socially responsibly. Mistrust of banks in many regions is not inexplicable – do we need to force people to move into riskier practices[24]? Bail-in laws can be implemented without democratic control and take effect immediately. The control of the financial flows of an entire region is a click away at the expense of the civil liberties and the privacy rights of citizens.

Instead it has been argued that banks should strive to make their customers happy in times of low profitability and increased competition[25]. This takes us to the question of monetary policy implications and risks.

Monetary dysfunctions

There is an ongoing vigorous debate on CPL advantages and challenges with respect to monetary policy, inflation and (negative) interest rates too (Rogoff, 2016; versus McAndrews, 2017; Koenig, 2016). Central bankers are hoping to impose aggressive negative interest rates targeting personal saving to stimulate the economy. This would be much more drastically implemented with limited cash options available. Pensioners would be forced to either spend their savings or see them shrink.

Financial administrators are facing huge current and projected shortfalls (state debt, unfunded future liabilities, extra costs related to Brexit, waves of migrants, political upheaval) would gain not only complete access to financial data but also potentially to the funds themselves. Confiscatory policies, which are starting to be discussed by some politicians, can be applied much more effectively in non-cash systems by the "digital finance official of the future": aggressive inheritance taxation, high wealth tax, drastic negative interest rates, offsetting of pensions, and laws reminiscent of the "Lastenausgleichsgesetz"[26].

Negative interests have followed quantitative easing in the USA (since 2008) and in the EU (since 2014), as efforts to fuel economic growth are not that successful. Negative rates are an incentive to spend and invest assets instead of conservatively storing them in deposits. Cash provides a way to resist negative returns, so this EU initiative is seen as a way of weakening this resistance and paving the ground for this monetary policy that essentially forces people away from savings into spending and riskier investments. Perhaps one should not encourage negative interest rates that may in the end undermine the trust in currency and institutions in general (Bourguinat, 2016).

Safety valve

Cash provides a safety valve for emergencies, downed services, hacking, natural disasters, war, personal needs[27] (e.g. Indian women saving their own money secretly without informing their husbands). Cyber threats are real and growing to all sorts to institutions, including bitcoin and similar payment systems (see, recent ransomware WannaCry attack and its effects)[28].

In the cashless Sweden experiment, data from the Swedish Ministry of Justice show that less cash means less robberies (cost saving on security) but an increase of money laundering cases and an increasing prevalence of digital frauds and credit card frauds.

Remarkably, even dirty cash has reportedly served to provide liquidity in the global financial markets during the crisis of 2009, according to the former Head of the UN Office of Drugs and Crime (Staudinger, 2009).

People and systems are not ready for cash payment limitations

All arguments in favor of CPL are predicated in the assumption that access to services, infrastructure and cultural preferences are all either in place or readily achievable. Nevertheless, for most parts of the world, including most of the EU, going cashless is unrealistic. There is nothing pragmatic about arguing for going cashless when 85 per cent of the global transactions are in cash[29], billions of people are unbanked or have no access to financial services, while internet availability and infrastructures are highly asymmetrical.

Vulnerable segments of our society, which do not have reliable access to electronic banking because of an inability to understand the technology involved, lack of reliable internet service, insufficient funds for up-to-date electronic equipment needed or just not being banked, will suffer greater negative consequences and will be further marginalized.

Victimization of the vulnerable

The CPL will be inevitably discriminatory regarding digital access, capacity and the financial control for many categories of the population, with a massive impact on the most vulnerable:

- Elderly: older people are more adversely affected, as they have trouble with understanding new technologies, have to cope with outdated hardware and in the context of increasingly sophisticated cybercrime, lack of updated cyber protection[30].
- Mentally ill: these may need extra control-options to limit potential financial harm in an e-economy[31].
- Financially excluded/unbanked: a substantial number of people have no bank accounts or access to financial services (exclusion)[32].
- Poor: the worst affected will be lower socio-economic strata[33] – furthering de-stabilizing injustice and inequalities.
- Rural communities or other areas without reliable internet service[34] are also affected.
- Digitally illiterate.
- Migrants (language, culture and technology barriers) and fragile communities.

As a recent study suggested:

> Rogoff and others call for a phaseout of high-denomination cash over a long time. The use of cash in crime, I'll argue, is preferable to the alternative, and there are limits to the benefits of deeply negative nominal interest rates. There are no adequate alternatives to cash for poor and unbanked people (McAndrews, 2017).

Popularity and freedom to choose

Citizens and savers must be able to enjoy the freedom to save and spend their savings in any form they want. People after all like cash! As a member of the executive board of the European Central Bank (ECB) pointed it out, EU citizens like and prefer cash and lobbying for CPL "fails to respect the will of the general population: cash remains popular. Recent research for the ECB finds that 80 per cent of transactions at point of sale are in cash[35]. Going against the current and will of the people when we confront populist trends and arguments about democratic deficits in the EU elevates further the evidentiary bar that new EU-wide policies must surpass.

Cash is also supported by strong cultural preferences[36]. One must not forget that one of the most important functions of cash is social. Cash is a common good shared by the community; one could argue that the creation of the euro has contributed to the European identity. Taking cash away is a form of taxation that is put forward in an effort to boost economic growth. By introducing negative interest rates for deposits, the idea is to force people to spend rather than keep losing part of their deposits at the bank and thus rejuvenate the economy (Rogoff, 2016), even though this has not worked very well (Japan has been doing this since 2015). Cash allows people to at least keep the same value and avoid this tax. Seen as another sign of governments' inability to fuel meaningful growth since 2011, suppressing cash and taxing deposits is met with suspicion (Marteau, 2016).

It is interesting to note here that current limits on large denominations have led to more, rather than less, cash in circulation[37]. According to a Deutsche Bank research paper[38] published in November 2016, the volume of euro cash in circulation has grown by 300 per cent from 2003 to Q3 2016 up to €1.1tn. The euro coins alone represent a value of €26bn. The euro notes which are used less are the small ones (5/10/20) and the 200 one. Instead, the €50 note is on the rise, as the largest €500 is decreasing. In the middle of the table, the €100 note seems to also compensate the loss of use of the €500 note among the population.

The downturn of the €500 note probably follows the announcement from the ECB in May 2016 that it will stop the production of the €500 banknote by the end of 2018 "taking into account concerns that this banknote could facilitate illicit activities". Instead, the highest value banknote in the world, the CHF 1000 saw its volume rise dramatically since 2014, with the peaks of demand when the Swiss Central Bank announced the introduction of negative interest rates. In 2015, the CHF 1000 banknote represented 61.1 per cent of the total value of the physical monetary mass, way before smaller banknotes. This increase of demand for the CHF 1000 note has also followed the announcement of the ECB about stopping the €500 note production, as many turned to a credible alternative to secure their assets.

The same "safe harbor" effect has been observed with the €500 banknote during the collapse of the US-based bank Lehmann Brothers in 2008.

Some estimates on the use of euro cash have been proposed on the basis of ECB statistics (2010-2015) and other research. These studies[39] show that the use of euro banknotes in circulation in total have grown from €763bn in 2008 to €1,017bn in 2014. Some uses have gone down as the domestic transactions through households and non-bank companies (−3 per cent of total) or the bank vault's cash (−2 per cent). However, the use or euro banknotes outside the EU has risen as a "safe harbor" and migrant money transfers (3 per cent) and domestic cash hoarding (2 per cent); the latter representing the largest slice of the total with 41 per cent of use in 2014.

Given that citizens regard cash as expression and instrument of personal freedom[40], essential rights and freedoms will be curtailed by CPL.

Better management and accountability

Cash helps control over-spending by citizens and promotes more responsible budget management[41]. It empowers every citizen and brings possible control and security over its immediate environment. But as a physical currency, cash has to be more accountable than digital currency. Like voting ballots that you can count and physically hold in your hands, you can physically hold cash in your hands, which is not the case with digital money. As soon as a technical or a political problem occurs, the digital money can evaporate, be replaced, be confiscated, be stolen, etc. Doing the same with cash is not impossible, as currency redeems have taken place over the centuries since the Roman Empire. However, its massive logistics make it a more complex and accountable operation, which is then presented, legitimized, discussed and approved under democratic checks and balances.

Sociability and generosity

CPM may undermine in some respects generosity as well. As we find in Australia, for example, going digital appears to be making people less generous in tipping and other respects, which mostly affects those having low-wage jobs.

Concluding remarks

The report could be extended to engage in a more precise test of fundamental EU principles, such as proportionality, subsidiarity, respect of human rights and better regulation and business principles. These exercises will be made elsewhere, but the foregoing suffices to show that the argument for CPL in the EU is weak and unsubstantiated. The IIA is badly articulated and rests on rather weak empirical ground, and it is accompanied by a methodologically unsound survey that can only produce biased views on the topic. While some crime control may be gained by CPL, some serious crime challenges will be left unaddressed or displaced, and others will grow and new ones will emerge. This is not a very good balance.

At the same time, social, economic, cultural and other fundamental rights, freedoms and many other legitimate interests stand to lose ground under CPL. Most victimized are likely to be the most fragile and vulnerable parts of society. Reducing inequalities, strengthening trust in institutions, promoting social justice, integrity and accountability are all high priorities that could be undermined at a time of confidence crises, democratic deficits and populist currents that shake the EU and the globe.

In short, the CPL argument is on thin ice both on internal logic (EU aims and principles) and externally (the ineffectiveness of the measures and the collateral damage they will cause). Instead of considering policies with little or no effect on stated objectives, the key aim ought to be the construction of a demand-side approach to serious crime problems. That is, a strategy based on a solid understanding of the root causes and key drivers of terrorism, serious crime and tax evasion. Supply-side approaches have not worked in the past (cf. drug trade), and those will be ineffective in the future too. In addition to smart-policing that takes advantage of new control options, available intelligence and better cooperation within and across countries, well thought-out financial controls can indeed be helpful and effective. Remember: good law enforcement and community policing are the best counter-terrorism.

Thus, CPL should not be imposed on member states against the will of the people, whose interests the proposed policy would undermine rather than protect. Policymakers bear the responsibility to maintain and enhance the reliability and credibility of the financial system, to ensure rule of law and fairness in markets and society, to shun rushed judgments and ill-considered measures and to consider thoroughly the potential adverse consequences of proposed policies. We hope with this report we assist in the exercise of this important task and responsibility.

Notes

1. It is interesting that the keyword "volume of cash transaction in the EU" in Google only brings two or three hits on the specific questions in the first hit page, as all the other hits relate to non-cash statistics and reports, including the ECB ones.
2. In particular, the questionnaire uses the following:

   - The limited answer options are for Q9 and Q14.
   - The biased answer options are for Q14 and Q15 suggesting business distortions.
   - Mixes different target audiences, thus muddying and diluting the result: Q20, mixes personal freedom with hindrance to business, private persons with businesses, which is especially inappropriate, as Q17 already asked about negative effects on the economy.
   - 'Leading' questions:
     - Q22: asking if the removal of the €500 note "would be sufficient to combat the misuse of cash in illicit activities" seems to expect much from one measure, while the effect of CPL is consistently and carefully worded to ask if it "could contribute" to combating crime.
     - Also Q23, asking only about the effectiveness of cash declarations, not if they would provide a more balanced and acceptable solution.

    - Q19: having stated that combating terrorist financing is a goal of this CPL, falsely implying that it can achieve this goal can be considered a leading question. It is also interesting that terrorism is not included in Q21 with other crimes but gets its own question with an inappropriately split answer option.
- The leading questions that use euphemistic language are Q13, Q14, Q15; these questions are pairing "beneficial" with "hindrance", thus avoiding "detrimental" when describing the downside of CPL.
- Lack of follow-up, clarifying questions: Q7, Q14; Q23 should have been followed up with more questions on the opinions on and effects of cash declarations to better assess the potential alternative to CPLs.
- Inappropriate splitting, opening the door to potentially distorting interpretations of the results: Q16 and Q19: the "yes, but only mildly" option could later be pooled either with the yes, or the no answers, potentially distorting the result.
- Unclear definitions: Q21 includes confusing categories of crime.
- Serious potential for misinterpretation of results. Q18, for example, "In your opinion, do existing restrictions on payments in cash established at national level distort competition or create obstacles to trade in the internal market?" is likely to get a "yes" answer from proponents of EU-wide CPLs as well as opponents to any CPLs. However, in the final interpretation, it could be used to suggest that EU-wide CPLs are needed, unwittingly making opponents into supporters.

3. A good deal of it smuggled (FATF, 2015a, 2015b; United States Treasury, 2015).
4. De minimis amounts that would not be prevented or monitored/controlled under the changes under consideration. In other instances, there are barter deals and alternative payment methods that will continue enabling terror groups to operate against security interests; see Europäische Kommission (2016), Ein Aktionsplan für ein intensiveres Vorgehen gegen Terrorismusfinanzierung – Mitteilung der Kommission an das Europäische Parlament und den Rat, COM(2016) 50 final, Straßburg. English version: http://eur-lex.europa.eu/resource.html?uri=cellar:e6e0de37-ca7c-11e5-a4b5-01aa75ed71a1.0002.02/DOC_1&format=PDF
5. Some terrorists in recent attack in Europe reportedly finance themselves through criminal trade of counterfeit or smuggled goods, which pose relatively low risk of detection and prosecution, high margins and lower penalties than drug dealing or human trafficking. Often, these terrorists interface with international criminal gangs that trade in illegal goods. While these transactions tend to be cash-based, they can be much better controlled by other means (e.g. at customs) than by CPL. We need to analyse critically "the link between illicit trade and terrorist financing has been proven for decades, it is reaching new proportions: it provides a particularly attractive source of funding in the current climate, which terrorist groups are using both deliberately and opportunistically. Therefore, examining terrorist organizations' involvement in illicit trade, particularly in smuggling and counterfeiting, is a key step in action against their financing" Bindner (2016); see also Passas (2010, 2011).
6. Drugs were exchanged for bomb-making material in the case of Madrid Passas (2010).
7. Colombian traffickers have done this with innocent migrants in the USA; it is possibly used by numerous Chinese and other migrants by Chinese and Mexican criminal groups (Passas, 2017).
8. See Mastercard Advisors: www.mastercardadvisors.com/_assets/pdf/MasterCardAdvisors-CashlessSociety.pdf
9. Passas (2016a, 2016b); Crimes and lawful, but awful risk-taking practices were behind the sub-prime mortgage debacle and subsequent major financial crisis that brought the world economy

to its knees (Morgenson and Rosner, 2012; Nguyen Tomson and Pontell, 2010) (Global Witness, 2009). The list can go on to include savings and loans institutions, Lloyds, Madoff, Citigroup, Bank of New York, BCCI, Polly Peck International and many other major scandals over the years. Notable also is that the financing of the 9/11 attacks in the USA, involved no cash transactions – all funds were transferred through formal financial institutions. So, even if it were feasible to eliminate cash transactions, this would not mean eliminating such consequential and significant risks. As Mastercard Advisors have reported, 85 per cent of global transactions are made in cash and 2.5 billion people have no bank account. This reality is not about to change very fast. It is, moreover, important to note the widespread distrust around the world of both government and banks, partly owing to high fees, capital controls, failures and bail-ins. In this context, it is important to recognize in practice the importance of cash and to improve regulatory policy". Additional cases and material in appended "recent non-cash [. . .]". See also Passas (2016a, 2016b); Schneider (2016a, 2016b).

10. See the extensive coverage of the Organized Crime and Corruption Reporting Project: www.occrp.org/en/laundromat/

11. See Koenig (2016).

12. Holznagel in Podiumsdiscussion (2016), available at: www.stiftung-marktwirtschaft.de/uploads/tx_ttproducts/datasheet/Tagungsbericht_Bargeld_21-09-2016.pdf. Rainer Holznagel is President of the Federation of German Tax Payers.

13. See interview Car-Ludwig Thiele, member of the Board of directors of the Bundesbank: www.wiwo.de/finanzen/geldanlage/bundesbank-vorstand-verteidigt-barzahlung-bargeld-ist-gepraegte-freiheit/19272014.html Wirtschaftswoche 25.1.2017, Mastercard Advisers study. Consumer cash usage – *a cross-country comparison with payment diary survey data*, John Bagnall, David Bounie, Kim P. Huynh, Anneke Kosse, Tobias Schmidt, Scott Schuh and Helmut Stix in Working Paper n° 1685/ June 2014. ECB. www.ecb.europa.eu/pub/pdf/scpwps/ecbwp1685.pdf

14. Consumer cash usage – *a cross-country comparison with payment diary survey data*, John Bagnall, David Bounie, Kim P. Huynh, Anneke Kosse, Tobias Schmidt, Scott Schuh and Helmut Stix in Working Paper n° 1685/ June 2014. ECB. www.ecb.europa.eu/pub/pdf/scpwps/ecbwp1685.pdf

15. See BBC article entitled "Google Plans to Track Credit Card Spending" on May 24, 2017, which ends by stating, "Companies track and monitor in order to advertise to us. If we don't want them to do that, take control; don't give your email address for a digital receipt, check the terms and conditions, avoid using loyalty cards and where possible choose to pay with cash" (emphasis added): www.bbc.co.uk/news/technology-40027706. In response to these concerns, new ways of experiencing the internet and transacting are emerging, including cryptocurrencies, such as Kin, Canada-based Kik's innovation announced this week. As one of the investors stated at a conference, "consumers would eventually revolt against the data collection from platforms like Facebook and Google, opting to pay small amounts of cryptocurrencies for a more private internet experience" (Balakrishnan, 2017).

16. See Holle in Podiumsdiscussion (2016).

17. Available at: www.snb.ch/fr/iabout/cash/id/qas_noten_1#t7

18. See BBC articles on "What Facebook knows about you": www.bbc.co.uk/programmes/b08qgbc3;"HowFacebook'stentaclesreachfurtherthanyouthink":www.bbc.com/news/business-39947942

19. See "Google plans to track credit card spending" Available at: www.bbc.com/news/technology-40027706

20. AGIS (2015): "There are valid privacy reasons for maintaining cash, and it provides the general public with direct access to central bank money. For an independent institution such as the ECB, maintaining that link is important, which is why we place great emphasis on ensuring people's continued trust in cash. For this purpose, we have overhauled the security

features in the euro's new Europa series. To date, we have released new versions of the lower denominations – up to and including the €50 note. Next year, we will introduce stronger and more secure versions of the higher denomination banknotes. Given this widespread desire to use cash, banks should facilitate rather than obstruct customers in using their preferred method of payment. Time will tell how the use of cash will evolve once instant payments are introduced in the near future".

21. Text available at: http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014L0059&from=EN

22. As reported by The Telegraph the "Bank of Cyprus said it had converted 37.5pc of deposits exceeding €100,000 into "class A" shares, with an additional 22.5pc held as a buffer for possible conversion in the future. Another 30pc would be temporarily frozen and held as deposits, the bank said" (see "Bank of Cyprus executes depositor bail-in" April 23, 2013 Available at: www.telegraph.co.uk/finance/financialcrisis/10024209/Bank-of-Cyprus-executes-depositor-bail-in.html.

23. See Stiglitz (2016); Varoufakis, (2016). As Taleb noted, even before the 2008 financial crisis: "Financial institutions have been merging into a smaller number of very large banks. Almost all banks are now interrelated. So, the financial ecology is swelling into gigantic, incestuous bureaucratic banks, so that when one fails they all fail" (2008: 225).

24. cf. bail-in practices and regulations after the crisis; the Cyprus experience; early German experience and in many countries, with banking scandals and bankruptcies.

25. www.ecb.europa.eu/press/key/date/2017/html/ecb.sp170508.en.html "it is important to ensure that customers' interactions with banks can be carried out in the manner that most satisfies the customers".

26. Stiftung Marktwirtschaft "Bares bleibt Wahres" Bargeld als Garant fuer Freiheit und Eigentum", Argumente zu Marktwirtschaft und Politik, No. 136, Nov 2016, Joerg Koenig. One of Koenig's arguments is that a fully transparent citizen will see his digital assets entirely at the mercy of the state. With state budgets becoming increasingly indebted and the future accounting looking increasingly unsustainable, he points out areas that would make tempting targets for fiscal authorities and that could essentially result in confiscation of property: tempting fiscal targets:

- Aggressive inheritance tax: this would disproportionally affect family businesses and entrepreneurs and threaten the survival of the company. Such businesses may opt to move their production abroad, resulting in the loss of national investment and jobs.
- Wealth tax: several parties have already drawn up plans for an annual wealth tax. The estimated additional revenue is in the 2-digit billion euros. But even a moderately small rate of 1 per cent would increase pressure of businesses and investment. The inheritance tax would result in capital flight and loss of investment and job. This would also be odd with the policy of promoting more self-reliance in saving for retirement because real estate, life insurance, stocks and savings accounts of every kind would be considered. Tax exemption limits will be reached quickly, even if they sound generous.
- Drastic negative interest rates: cash is an obstacle to some economists and national bankers who favor negative interest rates. If cash was abolished, drastic negative rates could be made to force savers to spend their money. Rogoff who has advocated for the successive abolishment of the $100, $50 and $20 bills, already projects a possible 6 per cent negative interest rate in Europe. Savers could then choose to immediately accept the confiscation of their property, move to high-risk investments or reduce their private nest egg/retirement saving by consumption in the present time.

- Offsetting pensions: those who have saved and have other sources to support themselves in their old age do not need state pensions – or so would be the call, misusing the principle of subsidiarity. Populists could demand that social security system should be relieved by offsetting different sources of income in old age. That contravenes the merit principle and would create negative incentives instead of more equality. Who would want to save for the future in such an environment?
- "Lastenausgleichgesetz": In 1952, the Lastenausgleichgesetz in Germany, resulted in a significant redistribution of wealth. German private persons and private corporations had to hand over 50 per cent of their assets in 120 quarterly installments to alleviate the "war and its effects". Such a law could sound enticing to populists. If those words in the preamble were replaced with "globalization and its effects such as poverty and marginalization," this fundamentally flawed law could sound dangerously intuitive: "In recognition of the right to compensation of those parts of the population that have been particularly affected by globalization and its effects such as poverty and marginalization and recognizing the fundamentals of social justice and economic possibilities, [. . .] the government enacts this law". Reinstating such a law would dwarf all other measures of wealth redistribution.

All the above "unconventional measures" have one thing in common: they could be implemented much more effectively in a cashless society, in which all property is electronically registered and nobody could keep cash under their matrass. In a cashless society, the state could set any fees and taxes and withdraw them from the citizens' accounts directly. Thus, the rule must be that whoever wants to protect effectively the right to property and defend against confiscation must advocate for the maintenance of cash.

27. See India, case and bad execution criticized broadly from The Economist to even proponents of "less cash", such as Rogoff, the author of *The Curse of Cash* – who condemned the recent India experiment. Many regions are known not to have access to financial services and bank accounts – infrastructures are weak and non-existent. Transactions of migrant communities with home countries will be negatively affected. Discontent and grievances are unhelpful for extremism, radicalization, forced migration and illegal people movement.
28. See, for example: www.bbc.com/news/technology-39924318, www.bbc.com/news/business-39947944,www.bbc.com/news/technology-39928456
29. See Mastercard advisors Available at: www.mastercardadvisors.com/_assets/pdf/MasterCardAdvisors-CashlessSociety.pdf
30. The House of Lords, select committee on financial exclusion report 2016-17, HL Paper 132, "tackling financial exclusion" , recommends that "non-digital access to social-security benefits and other services remain possible [. . .] available indefinitely". (Recommendation 14, Paragraph 261); Paragraph 21: "93% of those aged 80 and over do not use internet banking", "one-third of people aged over 80 have never used a cash machine or prefer to avoid them".
31. The House of Lords "tackling financial exclusion" (2017), Recommendation 9, Paragraph 176.
32. Beyond numerous World Bank and other studies showing that billions of people around the world are unbanked, see The House of Lords "tackling financial exclusion" 2017, Paragraph 21: 1.71 million adults do not have a bank account in the UK.
33. See the grotesque India intervention effects.
34. The House of Lords "tackling financial exclusion" 2017, Paragraph 21: "12mio people [in the UK] live in rural areas with poor internet access. 3.8mio UK households without any internet".

35. Speech by Yves Mersch, member of the executive board of the ECB, 2017 IIF Spring Membership Meeting, Tokyo, 8 May 2017 available at: www.ecb.europa.eu/press/key/date/2017/html/ecb.sp170508.en.html
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39. See Deutsche Bank study on cash freedom and crime.
40. Koenig (2016) Stiftung Marktwirtschaft "Bares bleibt Wahres" Bargeld als Garant fuer Freiheit und Eigentum", Argumente zu Marktwirtschaft und Politik, No. 136, Nov 2016; www.wiwo.de/finanzen/geldanlage/bundesbank-vorstand-verteidigt-barzahlung-bargeld-ist-gepraegte-freiheit/19272014.html ; Wirtschaftswoche 25.1.2017
41. multiple sources.

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